

REMARKS/ARGUMENTS

Applicant, responsive to the Final Action, conducted a Telephonic Interview with Examiner Misleh on May 19, 2010. During the Telephonic Interview, Applicant argued that certain elements of Massimo Mancuso et al. (U.S. Patent No. 6,256,414) (hereinafter, "Mancuso et al.") relied upon by the Examiner in rejecting claims 1 and 27 fail to teach certain elements set forth in claims 1 and 27. The Examiner has recommended that Applicant present the arguments put forth in a Request for Reconsideration, as set forth in the Interview Summary.

Claim Rejections - 35 U.S.C. §102

The 35 U.S.C. §102(b) rejection of claims 1 and 27 based on Mancuso et al. should be withdrawn for the reasons set forth below.

Claim 1 recites "a noise reducing unit (see element 19 in Fig. 1) for the noise related to random noise in the signal based on the amount of noise itself corrected by the correction unit."

The Final Action relies on element 255 of Mancuso et al. stating "element 255 is clearly subsequent and directly attached to the noise reduction unit 250" and further that "element 255 "corrects alterations ...of one or more color categories without altering the other color of the image...improves the quality of representation [in an image]." referring to column 4, lines 54-60 of Mancuso et al. and states that "element 255 is strictly intended to improve the quality of the image without introducing any additional noise in the image, which satisfactorily meets the claimed requirement of 'reducing the noise in the signal.'"

It is respectfully submitted that unit 255 **does not** correct or reduce noise. The text in the specification, column 4, lines 54-63 of Mancuso, states that unit 255 "corrects alterations...of one or more color categories without altering the other

colors of the image.” The “alteration” in color made by unit 255 is due to “the type of illumination” that the display is exposed to and **is not due to or “based on”** a correction in noise. The IEEE technical article, accompanying this Request and identified as Exhibit “A”, entitled “Color Enhancement of TV Picture Using RGB Sensor,” and included in the text of Mancuso et al. at column 4, lines 54-63 clearly supports and elaborates on the text at column 4, lines 55-56, which recite “corrects alterations (dependent on the type of illumination) of one or more color categories.” The IEEE article, at the left-hand column of page 182, under the heading INTRODUCTION, states “fluorescent, incandescent, or daylight illumination” affects “the brightness, saturation, hue, and contrast of the color image” to “become changed.” The last 2 lines of the left-hand column at page 182 point out that “color enhancement using RGB sensor” compensates for “the influence of ambient [light].”

Fig. 4 on page 184 of the IEEE article shows the RGB sensor for detecting ambient light. Fig. 3 shows the outputs of the RGB sensor, type AM33RGB-01, coupled to the inputs of a color sensor circuit to discriminate ambient light conditions. The text on the left-hand column of page 184 describes how the outputs of the R, G and B circuits vary in the range of 0-5 volts dependent on the ambient light detected by the RGB sensor to compensate for the effect of the ambient light on the image displayed by the image display device, described in the IEEE article as a CPT (color picture tube). The text further states when the “outer environment is dark, each output voltage of the red, green, and blue sensors is below 1V” and the output is between 1 and 2V when the “outer environment is under fluorescent lamp or incandescent lamp.” Typically, skin color is employed as the standard reference color. See page 187, left-hand column under the heading EXPERIMENTAL RESULTS.

There is **no** text in either Mancuso et al. or the attached IEEE article, taken alone or in combination with Mancuso et al., that teaches or even remotely suggests

that unit 255 of Mancuso reduces noise in an image signal based on a noise estimate corrected by a shooting condition estimate. It is the **effect of ambient light** on the CPT (color picture tube) display that causes one or more of the colors in the displayed image to be altered and it is the detection of the type of ambient light that impinges on the display (and detected by the RGB sensor) that determines the needed correction **and not a noise signal**. The objective of compensating for the alteration of one of the color categories may, for example, be to improve the quality of skin tone in a portrait or the sky and grass in a landscape, as described in the IEEE article of Exhibit A.

In addition, it is submitted that reduction of noise in the image signal has already been performed by the noise-reduction unit 250 of Mancuso et al. **before** the image signal reaches the color tone correction unit 255. Mancuso et al. is limited to teaching a one-step procedure of estimating noise at unit 245 and reducing the noise in the image signal at unit 250. The color correction by unit 255 does not reduce the already reduced noise in the output of unit 250. In contrast, claim 1 sets forth a two-step procedure wherein the noise is estimated by unit 17, the estimated noise is corrected by unit 18 (first step), based on the estimate of a shooting condition provided by shooting condition estimator 16 and the noise in the image signal is reduced by unit 19 (second step), based on the amount of noise corrected by the correction unit. These steps are not taught or even remotely suggested by Mancuso et al.

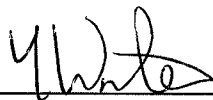
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Conclusion

For the above reasons, it is submitted that the §102(b) Final rejection of claims 1 and 27 based on Mancuso et al. should be withdrawn.

Respectfully submitted,

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Enclosures